

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/748,417	12/30/2003	Masaki Sato	2204-031470	7842
	7590 10/05/2004		EXAMINER	
WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C. 700 KOPPERS BUILDING			HESS, BRUCE H	
436 SEVENT			ART UNIT	PAPER NUMBER
PITTSBURG	H, PA 15219		1774	
-			DATE MAILED: 10/05/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	,			
Office Action Summary		10/748,417	SATO ET AL.				
		Examiner	Art Unit				
		Bruce H Hess	1774				
Period fe							
I HE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply poperiod for reply is specified above, the maximum statutory period wire to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from to	nely filed s will be considered timely. the mailing date of this communication.				
Status							
1)	Responsive to communication(s) filed on						
	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex	k parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Dispositi	on of Claims						
_	Claim(s) 1-20 is/are pending in the application						
	4a) Of the above claim(s) is/are withdrawn from consideration.  i) Claim(s) is/are allowed.						
	Claim(s) 1-20 is/are rejected.	,					
	Claim(s) is/are objected to.						
	Claim(s) are subject to restriction and/or	alaction requirement					
		election requirement.					
Applicati	on Papers						
9) 🗌 -	The specification is objected to by the Examiner.						
10) 🔲 -	The drawing(s) filed on is/are: a)☐ accep	oted or b) objected to by the Ex	xaminer.				
	Applicant may not request that any objection to the dr	awing(s) be held in abeyance. See	37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correctio	n is required if the drawing(s) is obje	ected to. See 37 CFR 1.121(d)				
11)[	The oath or declaration is objected to by the Exa	miner. Note the attached Office A	Action or form PTO-152.				
	nder 35 U.S.C. § 119						
12) 🗌 🔏	Acknowledgment is made of a claim for foreign p ☐ All b) ☐ Some * c) ☐ None of:	riority under 35 U.S.C. § 119(a)-(	(d) or (f).				
, –	1. Certified copies of the priority documents I	have been seen					
	2. Certified copies of the priority documents in	nave been received.					
	represent priority documents i	decuments have been received	1 No				
	<ol> <li>Copies of the certified copies of the priority application from the International Bureau (</li> </ol>	PCT Pule 17 2(a))	in this National Stage				
* Se	ee the attached detailed Office action for a list of	the certified copies not received					
	and a last of	and donained copies flut received.	,				
\ttachment( \ \ <b>X</b> `l N = 0	· ·	·					
Notice  Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (P	TO-413)				
i) 🔲 Inform	ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date	Paper No(s)/Mail Date 5) Notice of Informal Pate 6) Other:	 ent Application (PTO-152)				
Patent and Tra-	demark Office	<u> </u>					

Application/Control Number: 10/748,417

Art Unit: 1774

1. Claims 1, 2 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al (U.S.P. 5,891,552) in view of Akada (U.S.P. 5,106,815).

Claims 3-6 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Akada and Kawai et al. (U.S.P 5,977,022).

Lu et al teach that non-dyeable materials such as plastic can be dyed by first applying a dye-receptive coating that contains glass flakes, calcium silicate and a U.V. absorber. Akada teaches that undyeable material such as plastic and metal can be dyed by first applying the same dye-receptive coating to either material (i.e., plastic or metal). Given Akada's teaching of the equivalence of plastic and metal as recipients of a dye-receptive coating, application of the Lu et al. dye—receptive coating to a metal substrate would have been obvious to one of ordinary skill in this art in the absence of unexpected results.

Kawai teach the advantages of applying an intermediate layer between a metal substrate and a dye-receptive coating. Use of the Kawai intermediate layer in the imaged article of Lu et al as modified by Akada would have been an obvious expedient to one of ordinary skill in this art in the absence of unexpected results.

2. Claims 7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Takeuchi et al (U.S.P. 6,265,345) or Yoshida et al. (U.S.P. 6,265,345) taken with Akada.

Claims 3-6 and 17-29 are ejected under 35 U.S.C. 103(a) as being unpatentable over either of Takeuchi et al. or Yoshida et al taken with Akada and Kawai.

Application/Control Number: 10/748,417

Art Unit: 1774

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Takeuchi et al or Yoshida et al taken with Akada and Lu et al.

Takeuchi et al and Yoshida et al teach that non-dyeable materials such as plastic can be dyed by first applying a dye-receptive coating that contains resin and silica powder. Akada teaches that undyeable material such as plastic and metal can be dyed by first applying the same dye-receptive coating to either material (i.e., plastic or metal). Given Akada's teaching of the equivalecet of plastic and metal as recipients of a dye receptive coating, application of the Takeuchi et al. or Yoshida et al. dye receptive coating to a metal substrate would have been obvious to one of ordinary skill in this art in the absence of unexpected results.

Kawai teaches the advantages of applying an intermediate layer between a metal substrate and a dye receptive coating. Use of the Kawai intermediate layer in the imaged article of either Takeuchi et al. or Yoshida et al as modified by Akada would have been an obvious expedient to one of ordinary skill in this art in the absence of unexpected results.

Lu at al teaches the use of U.V. absorbers in dye-receptive coatings. Use of the LU et al. U.V. absorber for its concomitant function in the dye-receptive layer of either Takeuchi et .al. or Yoshida et al. would have been obvious to one of ordinary skill in this art in the absence of unexpected results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce Hess whose telephone number is (571) 272-1525. The examiner can normally be reached on Monday to Friday 9 Am to 5 PM.

Application/Control Number: 10/748,417

Art Unit: 1774

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B. Hess/af September 29, 2004 Bune Hone